

University of GA Coop Ext Service

Poa annua Control in Overseeded 'Tifway' Bermudagrass.

Trial ID: TURF1402 Investigator: Bill Nutt
 Location: Griffin Study Dir.: Tim R Murphy

GENERAL TRIAL INFORMATION

Study Director: Tim Murphy Title: Weed Scientist
 Affiliation: UGA-CAES
 Other Investigator: Bill Nutt Title: ARC I
 Affiliation: UGA-CAES
 Trial Status: CLOSED Initiation Date: 7-30-2002
 City: GA Station State/Prov.: GA

CROP AND PEST DESCRIPTION

Weed 1. POAAN Annual Bluegrass *Poa annua*
 Crop 1: CYNDA Bermudagrass *Cynodon dactylon* Variety: Tifway
 Planting Method: Established
 Crop 2: LOLPE Perennial Ryegrass *Lolium perenne* Variety: Sunrise Primo Blend

Pure seed	VARIETY	KIND	GERM	TOTAL	ORIGIN
39.27%	Jet	Perennial Ryegrass	85%	85%	OR
39.07%	Sonata	Perennial Ryegrass	85%	85%	OR
19.08%	Wind Star	Perennial Ryegrass	85%	85%	OR

 Planting Date: 9-30-2002 Planting Method: Broadcast Rate: 8.0 LB/1000FT2

Plot Width, Unit: 6 FT Plot Length, Unit: 10 FT Reps: 4
 Site Type: Simulated golf course fairway Study Design: RANDOMIZED COMPLETE BLOCK
 Field Prep./Maintenance: Irrigated site. Maintained at 0.625 inch, with reel mower.

APPLICATION DESCRIPTION

	A	B	C	D
Application Date:	8-13-2002	1-28-2003	7-30-2002	9-20-2002
Time of Day:	2:30 PM	12:30 PM	11:15 AM	1:45 PM
Application Method:	BROADCAST	BROADCAST	BROADCAST	BROADCAST
Application Timing:	PRE	PRE/POST	PRE	PRE
Applic. Placement:	SOIL/FOLR	SOIL/FOLR	FOLIAR	FOLIAR
Air Temp., Unit:	88 F	49 F	82 F	83 F
% Relative Humidity:	45	30	79	72
Wind Velocity, Unit:	3.5 MPH	2 MPH	1.4 MPH	4 MPH
Dew Presence (Y/N):	N	N	Y	N
Soil Temp., Unit:	86 F	36 F	81 F	82 F
Soil Moisture:	GOOD	GOOD	GOOD	GOOD
% Cloud Cover:	25	0	85	70

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CROP STAGE AT EACH APPLICATION

	A	B	C	D
Crop 1 CYNDA Stage:	100% Green	Dormant	100% Green	100% Green
Height, Unit:	0.625 inch	0.75 inch	0.625 inch	0.75 inch
Crop 2 LOLPE Stage:	1-3Tiller			
Height, Unit:	0.75 inch			

WEED STAGE AT EACH APPLICATION

	A
Weed 1 POAAN Stage:	1-3 Tiller

APPLICATION EQUIPMENT

	A	B	C	D
Appl. Equipment:	Backpack	Backpack	Backpack	Backpack
Operating Pressure:	26 psi	26 psi	26 psi	26 psi
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	8004	8004	8004	8004
Nozzle Spacing, Unit:	20 inch	20 inch	20 inch	20 inch
Boom Length, Unit:	5 feet	5 feet	5 feet	5 feet
Boom Height, Unit:	19 inch	19 inch	19 inch	19 inch
Ground Speed, Unit:	3 mph	3 mph	3 mph	3 mph
Carrier:	Water	Water	Water	Water
Spray Volume, Unit:	25 gpa	25 gpa	25 gpa	25 gpa
Propellant:	CO2	CO2	CO2	CO2
Tank Mix (Y/N):	N	N	N	N

Trt No Treatment Application Comment

A	8-13-02; Granular treatments mixed with sand and broadcast by hand. All treatments watered in after application with .25-.50" irrigation.
B	1-28-03; Granular treatment mixed with sand and broadcast by hand.

Trial Comments

10-16-02: No Bermudagrass injury observed on this date.
 10-21-02: Fertilized entire area with 1 lb N/1000 sq. ft. as 34-0-0 with Vicon spreader.
 1-27-03: Density ratings on this date may reflect very cold temperatures over the past week.
 1-23-03: Low temperature 12 F.
 1-24-03: Low temperature 8.4 F.
 2-25-03: Broadcast 1 lb N/1000 sq.ft. as 10-10-10 fertilizer.
 1-28-03: Unable to make density rating of Annual Bluegrass, POAAN, due to small size and similarity to Perennial Ryegrass.

DENSITY RATINGS FOR UNTREATED CONTROL CHECK

	<u>101</u>	<u>207</u>	<u>307</u>	<u>412</u>
POAAN,3-3-03	30	15	20	20
POAAN,4-3-03	35	15	20	20
POAAN,4-28-03	35	10	10	15

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Poa Annua, Annual Bluegrass, Control in Overseeded 'Tifway' Bermudagrass.

Weed Code							CYND A	CYND A	LOLPE	LOLPE	
Crop Code							Folaig	Folaig			
Part Rated							Injury	Injury	Density	Density	
Rating Data Type							0-100	0-100	0-100	0-100	
Rating Unit							8-5-2002	8-13-2002	10-24-2002	11-13-2002	
Rating Date							6 DA-C	0 DA-A	72 DA-A	92 DA-A	
Trt-Eval Interval											
Trt No.	Treatment Name	Form Amt	Fm Ds	Rate Rate	Grow Unit	Appl Stg	Code				
1	Untreated check							0 a	0 a	33 a	41 ab
2	Dimension fb	40	WP	0.38	lb ai/a	6 WBS	A			33 a	44 a
	Dimension	40	WP	0.38	lb ai/a	17WPS	B				
3	Dimension fb	1	EC	0.38	lb ai/a	6 WBS	A			34 a	44 a
	Dimension	1	EC	0.38	lb ai/a	17WPS	B				
4	Dimension fb	0.25	GR	0.38	lb ai/a	6 WBS	A			36 a	45 a
	Dimension	0.25	GR	0.38	lb ai/a	17WPS	B				
5	Dimension fb	2	SC	0.38	lb ai/a	6 WBS	A			35 a	44 a
	Dimension	2	SC	0.38	lb ai/a	17WPS	B				
6	Dimension fb	40	WP	0.5	lb ai/a	6 WBS	A			35 a	45 a
	Dimension	40	WP	0.5	lb ai/a	17WPS	B				
7	Dimension fb	1	EC	0.5	lb ai/a	6 WBS	A			35 a	44 a
	Dimension	1	EC	0.5	lb ai/a	17WPS	B				
8	Dimension fb	0.25	GR	0.5	lb ai/a	6 WBS	A			35 a	43 ab
	Dimension	0.25	GR	0.5	lb ai/a	17WPS	B				
9	Dimension fb	2	SC	0.5	lb ai/a	6 WBS	A			34 a	40 ab
	Dimension	2	SC	0.5	lb ai/a	17WPS	B				
10	Barricade	65	WG	0.5	lb ai/a	8WBS	C	0 a	0 a	33 a	38 b
11	TranXit + Nonionic surfactant	25	WG	0.016	lb ai/a	2WBS	D			35 a	45 a
				0.25	% v/v	2WBS	D				
12	TranXit + Nonionic surfactant	25	WG	0.032	lb ai/a	2WBS	D			34 a	44 a
				0.25	% v/v	2WBS	D				
LSD (P=.05)							0.0	0.0	4.0	4.8	
Standard Deviation							0.0	0.0	2.8	3.3	
CV							0.0	0.0	8.06	7.68	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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Weed Code							LOLPE	LOLPE	LOLPE	LOLPE
Crop Code							Density	Density	Density	Density
Part Rated							0-100	0-100	0-100	0-100
Rating Data Type							11-25-2002	12-23-2002	1-27-2003	3-3-2003
Rating Unit							104 DA-A	132 DA-A	167 DA-A	202 DA-A
Rating Date										
Trt-Eval Interval										
Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Grow Unit	Appl Stg	Code			
1	Untreated check							49 a	54 ab	
2	Dimension fb	40 WP		0.38 lb ai/a	6 WBS	A		49 a	49 ab	
	Dimension	40 WP		0.38 lb ai/a	17WPS	B			48 b	
3	Dimension fb	1 EC		0.38 lb ai/a	6 WBS	A		50 a	59 a	
	Dimension	1 EC		0.38 lb ai/a	17WPS	B			55 ab	
4	Dimension fb	0.25 GR		0.38 lb ai/a	6 WBS	A		49 a	58 ab	
	Dimension	0.25 GR		0.38 lb ai/a	17WPS	B			55 ab	
5	Dimension fb	2 SC		0.38 lb ai/a	6 WBS	A		48 a	49 ab	
	Dimension	2 SC		0.38 lb ai/a	17WPS	B			48 b	
6	Dimension fb	40 WP		0.5 lb ai/a	6 WBS	A		46 ab	54 ab	
	Dimension	40 WP		0.5 lb ai/a	17WPS	B			53 ab	
7	Dimension fb	1 EC		0.5 lb ai/a	6 WBS	A		46 ab	51 ab	
	Dimension	1 EC		0.5 lb ai/a	17WPS	B			51 ab	
8	Dimension fb	0.25 GR		0.5 lb ai/a	6 WBS	A		46 ab	49 ab	
	Dimension	0.25 GR		0.5 lb ai/a	17WPS	B			48 b	
9	Dimension fb	2 SC		0.5 lb ai/a	6 WBS	A		41 b	48 b	
	Dimension	2 SC		0.5 lb ai/a	17WPS	B			48 b	
10	Barricade	65 WG		0.5 lb ai/a	8WBS	C		41 b	48 b	
11	TranXit +	25 WG		0.016 lb ai/a	2WBS	D		50 a	56 ab	
	Nonionic surfactant			0.25 % v/v	2WBS	D			56 a	
12	TranXit +	25 WG		0.032 lb ai/a	2WBS	D		46 ab	51 ab	
	Nonionic surfactant			0.25 % v/v	2WBS	D			54 ab	
LSD (P=.05)								5.5	9.1	7.3
Standard Deviation								3.8	6.3	5.1
CV								8.12	12.1	9.91

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

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							LOLPE	POAAN	POAAN	POAAN	
Weed Code											
Crop Code											
Part Rated											
Rating Data Type							Density	Control	Control	Control	
Rating Unit							0-100	0-100	0-100	0-100	
Rating Date							4-3-2003	3-3-2003	4-3-2003	4-28-2003	
Trt-Eval Interval							233 DA-A	202 DA-A	233 DA-A	258 DA-A	
Trt No.	Treatment Name	Form Amt	Fm Ds	Rate	Unit	Grow Stg	Appl Code				
1	Untreated check							76 abc	0 c	0 b	0 b
2	Dimension fb	40	WP	0.38	lb ai/a	6 WBS	A	68 bcd	58 b	49 a	45 a
	Dimension	40	WP	0.38	lb ai/a	17WPS	B				
3	Dimension fb	1	EC	0.38	lb ai/a	6 WBS	A	76 abc	70 ab	61 a	58 a
	Dimension	1	EC	0.38	lb ai/a	17WPS	B				
4	Dimension fb	0.25	GR	0.38	lb ai/a	6 WBS	A	79 ab	81 ab	54 a	48 a
	Dimension	0.25	GR	0.38	lb ai/a	17WPS	B				
5	Dimension fb	2	SC	0.38	lb ai/a	6 WBS	A	78 ab	70 ab	59 a	64 a
	Dimension	2	SC	0.38	lb ai/a	17WPS	B				
6	Dimension fb	40	WP	0.5	lb ai/a	6 WBS	A	63 d	63 ab	46 a	50 a
	Dimension	40	WP	0.5	lb ai/a	17WPS	B				
7	Dimension fb	1	EC	0.5	lb ai/a	6 WBS	A	65 cd	65 ab	48 a	48 a
	Dimension	1	EC	0.5	lb ai/a	17WPS	B				
8	Dimension fb	0.25	GR	0.5	lb ai/a	6 WBS	A	74 a-d	83 ab	73 a	61 a
	Dimension	0.25	GR	0.5	lb ai/a	17WPS	B				
9	Dimension fb	2	SC	0.5	lb ai/a	6 WBS	A	79 ab	78 ab	74 a	69 a
	Dimension	2	SC	0.5	lb ai/a	17WPS	B				
10	Barricade	65	WG	0.5	lb ai/a	8WBS	C	80 a	90 a	80 a	80 a
11	TranXit + Nonionic surfactant	25	WG	0.016	lb ai/a	2WBS	D	83 a	74 ab	64 a	59 a
				0.25	% v/v	2WBS	D				
12	TranXit + Nonionic surfactant	25	WG	0.032	lb ai/a	2WBS	D	80 a	71 ab	54 a	56 a
				0.25	% v/v	2WBS	D				
LSD (P=.05)							10.5	27.1	30.0	32.4	
Standard Deviation							7.3	18.7	20.8	22.5	
CV							9.71	28.06	37.81	42.38	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)